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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,867	11/14/2003	William Hunter Hudson	3382-66136	1875

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KLARQUIST SPARKMAN LLP
121 S.W. SALMON STREET
SUITE 1600
PORTLAND, OR 97204

EXAMINER	
MCCARTHY, CHRISTOPHER S	

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/713,867	HUDSON ET AL.	
	Examiner	Art Unit	
	Christopher S. McCarthy	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-20* is/are rejected.

7)☒ Claim(s) *10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/26/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Page 18, lines 16-17 recites "LIFO (last-in, last-out)"; the applicant may have meant this as "LILO" or "(last-n, first-out)". Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim recites mere software components, i.e., programs, files, and databases. These components are not represented on a tangible medium, such as a computer-readable medium comprising computer-readable instructions executing to perform the desired functions.

Claim Rejections - 35 USC § 112

3. Claims 9 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 9, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

5. Regarding claim 15, it contains the trademark/trade name Watson technologies. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe Watson technologies and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4-7, 11-14, 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hines U.S. Patent Application Publication US2002/0112200A1.

As per claim 1, Hines teaches a method of troubleshooting software hangs on a computing device (paragraph (¶) 0006), the method comprising: capturing data associated with a hang (¶ 0006); extracting attributes associated with the hang (¶0013, 0014); and comparing the extracted attributes to a database of issues to troubleshoot the hang (¶ 0014, 0012).

As per claim 2, Hines teaches the method of claim 1 further comprising: packaging the captured data into a file (¶ 0013); and assigning the packaged file an identification value for tracking the hang (¶ 0038).

As per claim 4, Hines teaches the method of claim 1, wherein comparing the extracted attributes further comprises: identifying the hang (¶ 0038); and providing a user with a solution to the hang, if the solution is available (¶ 0020).

As per claim 5, Hines teaches the method of claim 1, wherein capturing data associated with a hang further comprises extending a schema by using a data capture program extension (¶ 0029, wherein a bug description/schema is added).

As per claim 6, Hines teaches the method of claim 1, wherein extracting attributes to diagnose the hang further comprises extending an attribute extraction schema through the use of an attribute plugin (¶ 0029, 0026, wherein, the Explorer program is used as an example of a plugin module to capture data that is used by the analysis tool).

As per claim 7, Hines teaches the method claim 1, wherein the database of issues comprises data to represent at least one hang event (¶ 0030, 0024).

As per claim 11, Hines teaches the method of claim 8, further comprising updating the history of hang events (¶ 0055).

As per claim 12, Hines teaches a system for troubleshooting software hangs comprising: a data capture program to capture data associated with a hang on a computing device (¶ 0028, 0026); a diagnostic data file to save the captured data associated with the hang (¶ 0024, 0006); a packaged file to wrap up the diagnostic data file with at least an identification value to identify the hang (¶ 0038; Fig. 2, items 212, 210); a packaged file repository operating to receive the packaged file (¶ 0055, 0029); a datamining utility operating to extract an attribute from the packaged file into a first attribute structure (¶ 0026, 0028); and a bucket database operating to maintain a second attribute structure and to generate a value based on a comparison of the first attribute structure to the second attribute structure (¶0030, 0014).

As per claim 13, Hines teaches the system of claim 12, wherein the value of the comparison of the first attribute structure to the second attribute structure comprises a known value (¶ 0030).

As per claim 14, Hines teaches the system of claim 13, wherein the known value is a solution to the hang (¶ 0030, 0031).

As per claim 16, Hines teaches the system of claim 12, wherein the datamining utility comprises a component of the computing device (¶ 0026, 0028).

As per claim 17, Hines teaches a method of operating a diagnostic data file from a client computing device, comprising: upon the occurrence of a hang event associated with a program at the client computing device (¶ 0026-0028), initiating a capture event to collect data associated with the hang event (¶ 0006, 0020); making a data image of the collected data from the capture event (¶ 0006, 0026-0028); mining the data image to extract attributes of the hang event (¶ 0014,

0026-0028); and structuring the extracted attributes to a format usable by an analysis tool (¶ 0023).

As per claim 18, Hines teaches the method of claim 17, wherein structuring the extracted attributes to a format usable by an analysis tool comprises generating a decision tree (¶ 0039-0044, figure 3, wherein, the analysis tool makes sequential decisions in the data capturing, solution process).

As per claim 19, Hines teaches the method of claim 17, wherein the data image of the collected data comprises a mini-dump (¶ 0018).

As per claim 20, Hines teaches the method of claim 17, further comprising analyzing the extracted attributes to determine whether the extracted attributes identify a known bug: if so, providing a solution to solve the hang event (¶ 0038, 0020); else, if the extracted attributes do not identify a known bug: sending the data image of the collected data to be diagnosed; upon discovery of a cause of the hang event, fixing the cause of the hang event; and updating the analysis tool to look for the cause of the hang event (¶ 0055, wherein the database is updated upon a new bug).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hines in view of Periera U.S. Patent Application Publication US2004/0194063A1.

As per claim 3, Hines teaches the method of claim 2. Hines does not teach wherein the identification value comprises a hash value associated with a call stack. Periera does teach wherein the identification value comprises a hash value associated with a call stack (¶ 0033 in the form of a call identifier). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the call stack identification system of Periera in the process of Hines. One of ordinary skill in the art would have been motivated to use the call stack identification system of Periera in the process of Hines because Periera teaches the desire of a faulty software module to be available to be examined to develop a possible fix (¶ 0007); an explicit desire of Hines (¶ 0002).

10. Claims 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hines in view of Ansari U.S. Patent Application Publication US2204/0153823A1.

As per claim 8, Hines teaches the method of claim 1, further comprising performing on the computing device (¶ 0027) the comparison of extracted attributes to the database of issues (¶ 0014, 0012, 0027); assigning the extracted attributes a value based on a history of hang events (¶ 0038); determining a potential culprit for the hang event based on the assigned values (¶ 0030). Hines does not teach performing troubleshooting steps to quarantine the potential culprit. Ansari does teach performing troubleshooting steps to quarantine the potential culprit (¶ 0027, wherein isolating is equivalent to quarantining). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the isolation process of Ansari in the process of

Hines. One of ordinary skill in the art would have been motivated to use the isolation process of Ansari in the process of Hines because Ansari teaches healing a software application using a server solution database (¶ 0004); an explicit desire of Hines (¶ 0011, 0029).

As per claim 9, Hines teaches the method of claim 8, wherein the potential culprit comprises one of a file, module, process, thread, block of code, instruction, or the like (¶ 0004).

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hines in view of Smith U.S. Patent Application Publication US2004/0098640A1.

As per claim 15, Hines teaches the system of claim 12. Hines does not explicitly teach wherein the data capture program comprises Watson technologies. Smith does teach Watson technologies (¶ 0008). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the data capture program of Watson of Smith as the data capture program of Hines. One of ordinary skill in the art would have been motivated to use the data capture program of Watson of Smith as the data capture program of Hines because Smith teaches wherein the Watson program is beneficial for capturing a snapshot of the computer program at the time of failure (¶ 0008); an explicit desire of Hines (¶ 0003).

Allowable Subject Matter

12. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. McCarthy whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher S. McCarthy
Examiner
Art Unit 2113